

## Claim Amendments

Amend the claims as follows:

1. (previously presented) A separable electrical connector for separably, electrically interconnecting the conductors of one multi-conductor cable to the conductors of a second multi-conductor cable, comprising:

at least two multi-conductor cables, each cable having a plurality of at least partially-exposed conductors, with the exposed conductors of two of the cables in proximity to one another, at least one such cable being a multi-axial cable comprising at least two spaced coaxial conductors;

anisotropic conductive elastomer (ACE) in electrical contact with the exposed conductors that are in proximity to one another; and

mechanical structure that holds at least the multi-axial cable and compresses the ACE, to provide electrical signal paths between the conductors of the cables that are in proximity to one another through the ACE.

2. (original) The electrical connector of claim 1 in which at least one cable is a ribbon cable.

3. (previously presented) The electrical connector of claim 2, further comprising a paddle board having conductors that are directly connected to the conductors of the ribbon cable, with the ACE layer against the conductors of paddle board.

4. (previously presented) The electrical connector of claim 3 in which two cables are ribbon cables.

5. (previously presented) The electrical connector of claim 17, further comprising a second paddle board having conductors that are directly connected to the conductors of the second ribbon cable, with the ACE layer against the conductors of both paddle boards.

6. (original) The electrical connector of claim 1 in which at least one cable is a flex cable.
7. (currently amended) The electrical connector of claim ~~7~~1 in which two cables are flex cables.
8. (currently amended) The electrical connector of claim 7 in which the conductors of both flex cables are ~~en~~approximate the surfaces of the cables, and the partially exposed conductors are terminated ~~in~~with conductive pads that face one another in the connector, the ACE lying directly against the pads of both cables.
9. (previously presented) The electrical connector of claim 1 in which two cables are multi-axial cables each comprising at least two spaced coaxial conductors.
10. (previously presented) The electrical connector of claim 9 in which the ACE lies directly against the conductors of both multi-axial cables.
11. (previously presented) The electrical connector of claim 9 further comprising printed circuit boards with conductors directly connected to the conductors of each of the multi-axial cables, with the ACE layer against the conductors of both boards.
12. (previously presented) The electrical connector of claim 1 in which the mechanical structure comprises a mounting sleeve coupled to at least one multi-axial cable.
13. (previously presented) The electrical connector of claim 12 in which the mechanical structure further comprises a clamp assembly coupled to the mounting sleeve.
14. (previously presented) The electrical connector of claim 12 in which the mounting sleeve is made by potting the end of the at least one multi-axial cable in a settable medium.
15. (currently amended) A separable electrical connector for separably, electrically interconnecting the conductors of a ribbon cable to the conductors of a second electrical device, comprising:

a first multi-conductor ribbon cable having a plurality of partially-exposed conductors;  
a paddle board having conductors that are directly connected to the conductors of the first ribbon cable;  
a second ribbon cable~~electrical device~~ having a plurality of exposed conductors;  
a layer of anisotropic conductive elastomer (ACE) in electrical contact with the exposed conductors of both the paddle board and the second electrical device; and  
means for compressing the ACE, to provide electrical signal paths between the conductors of the cable and the conductors of the second electrical device through paddle board and the ACE.

16. (original) The electrical connector of claim 15 further comprising a second paddle board having conductors that are directly connected to the conductors of the second ribbon cable, and in which the ACE is in direct contact with the two paddle boards~~in which the second electrical device is a printed circuit board (PCB).~~

17. (canceled)

18. (currently amended) A separable electrical connector for separably, electrically interconnecting the conductors of two flex cables, comprising:

two flex cables, each having a plurality of exposed conductors;  
a layer of anisotropic conductive elastomer (ACE) in ~~electrical~~ direct contact with the conductors of both of the flex cables; and

means for compressing the ACE, to provide electrical signal paths between the conductors of the cables through the ACE.

19-20. (canceled)